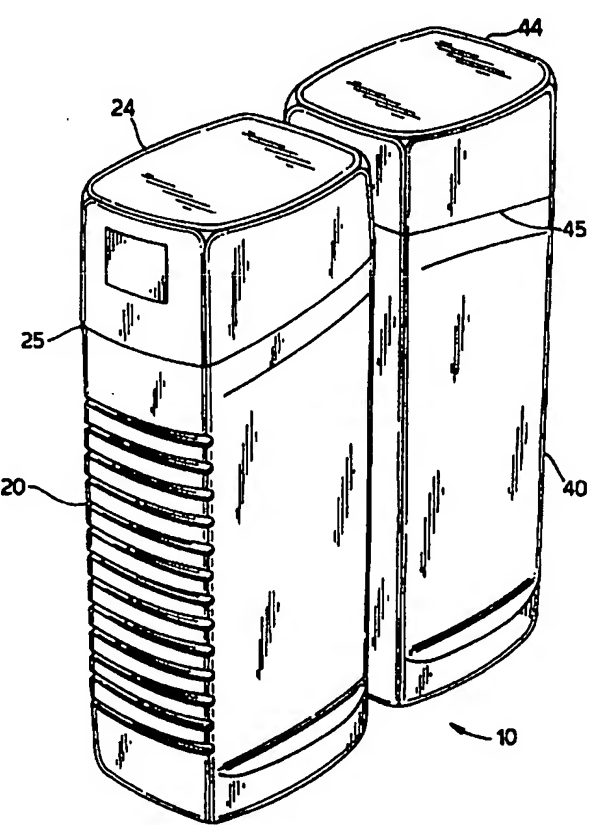


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| (21) International Application Number: PCT/GB95/02472 (22) International Filing Date: 19 October 1995 (19.10.95) (30) Priority Data: 9421121.6 19 October 1994 (19.10.94) GB (71) Applicant (for AU BB CA GB IE KE LK MG MW NZ SD SG SZ TT UG only): UNILEVER PLC [GB/GB]; Unilever House, Blackfriars, London EC4P 4BQ (GB). (71) Applicant (for all designated States except AU BB CA GB IE KE LK MG MW NZ SD SG SZ TT UG): UNILEVER N.V. [NL/NL]; Weena 455, NL-3013 AL Rotterdam (NL). (72) Inventor: BLAIR, Graham, John; 4 Huntington Close, Moreton, Wirral, Merseyside L46 6HU (GB). (74) Agents: HAMILTON, Alistair et al.; Mewburn Ellis, York House, 23 Kingsway, London WC2B 6HP (GB). | | (81) Designated States: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG). Published <i>With international search report.</i> |
| (54) Title: LAUNDRY PRODUCT PACK (57) Abstract <p>A laundry product pack (10) is disclosed which comprises two or more product compartments (20, 40) isolated from one another. A different laundry product (22, 42) is stored in each compartment (20, 40). Each compartment (20, 40) is provided with a respective closure cap (24, 44) associated with each of which is a dispensing means (26, 46) whereby each compartment (20, 40) can be opened independently from the or each other, so allowing the product (22, 42) to be dispensed therefrom.</p>  <p>The diagram shows a laundry product pack (10) consisting of two compartments (20, 40). Each compartment has a closure cap (24, 44) and a dispensing means (26, 46). The compartments are isolated from one another. The pack is shown in a perspective view, with the left compartment (20) and the right compartment (40) clearly visible. The closure caps (24, 44) are at the top of each compartment, and the dispensing means (26, 46) are located on the front face of each compartment. The pack (10) is shown in a standing position.</p> | | |

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LAUNDRY PRODUCT PACK

This invention relates to a pack for laundry or other washing products, and more particularly to a unitary pack for providing a plurality of different such laundry, especially detergent, products for selective use by a consumer.

In recent years, developments in the art of detergents and other cleaning products have resulted in the availability of a variety of different types of such products, either in the form of powders or liquids, which have properties and are formulated so as to be suitable for a particular washing applications, such as for example the washing of particular types of fabric. For instance, a now common feature of some modern detergents is that they are specially designed for washing highly coloured fabrics with little or reduced tendencies of colours to fade upon repeated washing. Certain other modern detergents are designed to be particularly suited for cleaning fabrics in low temperature washing regimes, and/or for cleaning typically white or strongly colourfast fabric substrates with a high bleaching action.

Up to now in the art of detergent and other laundry product packaging, packs of varying volume sizes, such as containers, bottles, sachets and cartons, contain a single product, the simple principle being that the consumer purchases a single pack according to the selected choice of detergent or other product he/she wishes to buy and use.

Currently therefore, if consumers wish to take advantage, in different washing applications, of the different properties of these various application-specific products that are available, then they must purchase more

than one pack. Not only does this incur, or be seen by the consumer as incurring, increased cost, but it also means that the consumer is faced with at least perceived, or maybe actual, inconvenience of yet another item of purchase which
5 has to be transported and stored. Furthermore, in modern times the typical brand consumer tends to purchase only a single given brand or type of laundry product on a regular basis, as a result of habit and/or brand loyalty, which is particularly prevalent in the field of detergent products.

10 Indeed, consumers of limited ranges of brands and/or types of detergent or other laundry products may be unaware of other such products that are available, or at least ignorant of the benefits that such other products can offer. This makes it difficult for manufacturers to introduce new
15 products successfully or to balance sales of lesser known or lesser used products against other perhaps better established, brands or product types.

There is therefore a need for a means of redressing the above problems, especially by way of a specially designed
20 type of package which on the one hand enables consumers to take advantage of or to be educated as to the benefits associated with various different laundry products, especially detergents which are available on a given supermarket shelf for example, and on the other hand assists
25 manufacturers and retailers to boost or otherwise control sales of particular desired products in accordance with the habits and tendencies of consumers to purchase other, different particular products.

Accordingly, in a first aspect, the present invention
30 provides a unitary laundry product pack including a first compartment containing a first laundry product, and at least one other compartment isolated from the first compartment

and containing a or a respective different laundry product, wherein each compartment has means for dispensing therefrom the respective product contained therein.

5 In preferred embodiments of the invention, the pack takes the form of two or more (however many separate compartments there are desired to be) containers integrally joined together, such as by virtue of a common wall or portion of a wall, or by means of a uniting web or other structural element linking the separate containers together
10 to form a unitary pack.

Particularly preferred is a unitary pack comprising two separate containers, each one being of a shape and form similar to a conventional laundry product container, which are joined together along corresponding side walls thereof
15 by a web of the material from which the containers themselves are formed.

Very desirable is that the unitary web is dimensioned and sufficiently strong and rigid such that it substantially avoids bending and the risk of being manually torn, whereby
20 the web joining the compartments of the pack maintains it substantially rigid and creates a substantially permanent join between the individual compartments of the pack.

According to the invention, any desired laundry product types may be contained in the individual
25 compartments of the pack. A typical example is, in a preferred embodiment, a different solid detergent powder in each compartment of a two-compartment unitary pack. By way of example, one powder may be designed especially for use on highly coloured (or non-colourfast) fabrics, while the
30 other powder is designed for outstanding bleaching performance of eg. white or non-coloured fabrics at low

washing temperatures.

Combinations of other solid detergent products, or combinations of liquid detergent products, or even combinations of liquid and solid products are also possible, as are combinations of detergents with other laundry products, eg. fabric conditioners, stiffening/starching products, and such-like. Examples of all the above product types are well known commercially.

In preferred embodiments of the invention, the dispensing means with which each compartment is provided comprises a mouth having closure means associated therewith, for example a screw cap, a hinged flap closure, a stopper closure or any other suitable closure means known in the art.

Most preferably, the closure means of each compartment comprises a hinged flap which at the same time as being opened forms a pouring spout via which product from the compartment can be selectively delivered for instance into a dosing shuttle or directly into a washing machine dispenser device.

To enable product to be dispensed from each compartment individually and with ease, especially by tipping or pouring, it is preferable that the closure/dispensing means of each compartment is provided at an upper region thereof at a location remote from the or each other neighbouring compartment.

It is desirable for the compartments of the unitary pack of the invention to be refillable with the respective laundry products, as is the trend nowadays in the context of single-compartment detergent packs. Accordingly, in

preferred embodiments of the invention the compartments of the pack may each comprise a removable cap or lid which provides ready access to the compartment interior for refill purposes. Conveniently, the closure/dispensing means of each compartment may be carried by or be formed as an integral element of, the respective cap or lid.

The size and shape of the unitary pack of the invention, and particularly the volume of each compartment, may be selected as required or as desired in accordance with the type of product to be contained therein and/or the washing or other application for which the product is intended to be used. For instance, if all the products contained in the pack are to be used by the consumer generally at the same rate, eg. in the case of two different formulations of detergent powder such as one for coloured fabrics and one for whites, then the compartments may be of equal volumes. If, on the other hand, the products contained in the pack are to be used by the consumer at different rates, eg. in the case of a detergent product in combination with a fabric conditioner, then the volumes of the individual compartments may differ and may be selected according to the typical rates of use by volume of the respective products.

The pack of the invention may be formed of any suitable material as is known in the art of detergent packaging. Preferred is a plastics material, eg. high density polyethylene.

In preferred forms, the pack is formed by blow- or injection moulding, preferably in a single step, as a one piece moulding. Alternatively the pack may take the form of a collapsible multi-compartment bag or like article.

Optionally, the pack of the invention may be provided with a handle for ease of carrying and dispensing the products therefrom.

5 According to a second aspect of the present invention,
there is proposed a method of providing a plurality of
different laundry products for selective use by a consumer,
the method comprising providing a unitary laundry product
pack including a first compartment containing a first one
10 of the said plurality of laundry products, and at least one
other compartment isolated from the first compartment and
containing a or a respective different one of said plurality
of laundry products, wherein each compartment has means for
dispensing therefrom the respective laundry product
15 contained therein, whereby each said laundry product is
selectively dispensable from its respective compartment via
the respective dispensing means according to the needs or
wishes of the consumer.

 The present invention further provides, in a third
20 aspect, a unitary pack for presenting to the consumer a
plurality of different laundry products for his/her
selective use, the packing including a first compartment for
containing a first one of said laundry products, and at
least one other compartment isolated from the first
25 compartment and for containing a or a respective different
one of said laundry products, wherein each compartment has
means for dispensing therefrom a respective laundry product
contained therein.

 In a fourth aspect the invention provides a method of
dispensing a selected one of a plurality of laundry products
30 from a unitary laundry product pack according to the first
aspect of the invention, the method comprising the steps of:

(i) selecting a particular one of said laundry products to be dispensed, and

(ii) dispensing said selected laundry product from its respective compartment via its respective dispensing means.

5 As used herein, the term "laundry product" is not to be construed as being strictly limited to products for use in washing or otherwise treating clothes. Any product used in cleaning or related treatments of any types of fabric, or even other substrates, for any purpose is intended to be
10 encompassed by this term.

A preferred embodiment of the present invention will now be described in detail, by way of example only, with reference to the accompanying drawings, in which:

15 Figure 1 is a perspective view of the preferred unitary laundry product pack according to the invention;

Figure 2 is a front elevational view of the pack of Figure 1, showing a closure/dispensing device of one of the compartments in an open position; and

20 Figure 3 is a top view of the laundry pack of Figure 1.

Referring to Figures 1 and 2, a unitary pack for a plurality of different laundry products, referred to generally by the reference numeral 10, includes a first
25 compartment 20 containing a first laundry product 22, and a second compartment 40 containing a second laundry product 42. The compartments 20, 40 are of equal volume, and are permanently and substantially rigidly joined together with a longitudinal connecting web 12.

The compartments 20, 40 are fitted with respective closure caps 24, 44 that can be removed to expose respective mouth openings 25, 45 for initial filling or re-filling of the compartments 20, 40 with their respective laundry products 22, 42 as and when desired.

Each of the closure caps 24, 44 is formed with a respective pouring spout 26, 46 to provide a means of dispensing the product from each respective compartment 20, 40. Each pouring spout 26, 46 is in the form of a hinged flap, preferably with a detent arrangement to maintain it in the closed condition to guard against unwanted egress or leakage of product from each compartment 20, 40.

The first and second compartments 20, 40 of the pack 10 and also the connecting web 12 are formed together as a one-piece blow-moulding from plastics material, eg. HDPE. Each closure cap 24, 44, together with its respective closure/dispensing means 26, 46, is also formed as a one-piece blow- or injection-moulding, preferably of the same material. The thickness of the connecting web 12 is selected such that the required degree of inflexibility thereof is inbuilt to give the pack the desired unitary, rigid single purchase item character.

By way of example, the first laundry product 22 in the first compartment 20 of the pack is a solid, particulate or granular detergent powder composed and formulated so as to be particularly suited to the washing of fabrics with strong colours, eg. the detergent powder sold by Unilever under the trade mark PERSIL COLOUR, whereas the second laundry product 42 in the second compartment 40 of the pack is a solid, particulate or granular detergent powder composed and formulated so as to be particularly suited to the washing of fabrics with a high bleaching action at low washing

temperatures, eg. the detergent powder sold by Unilever under the trade mark PERSIL POWER.

5 In accordance with the invention, therefore, the provision of these two different detergent powder products in separate compartments of a unitary pack purchasable and usable by the consumer as a single purchased item enables the consumer to be provided simply and conveniently with multiple products for use in different applications, as desired and as selectable by the consumer.

10 It is to be understood that the present invention has been described above by way of example only with reference to a specific exemplary preferred embodiment. Many variations and modifications from that which has been specifically described and illustrated are possible within
15 the scope of the invention, as will be readily apparent to persons skilled in the art.

CLAIMS:-

1. A unitary laundry product pack (10) including a first compartment (20) containing a first laundry product (22), and at least one other compartment (40) isolated from the first compartment (20) and containing a or a respective different laundry product (42), wherein each compartment (20,40) has means (26,46) for dispensing therefrom the respective product (22,42) contained therein.
5
2. A pack according to claim 1, wherein the said compartments (20,40) comprise two or more containers integrally joined together by virtue of a common wall or portion of a wall, or by means of a uniting web (12) or other structural element linking the separate containers (20,40) together to form the said unitary pack (10).
10
3. A pack according to claim 2, wherein two said containers (20,40) are provided and joined by a uniting web (12) of material from which the said containers are formed, the said web (12) being dimensioned and sufficiently strong and rigid such that it substantially avoids bending and being manually torn.
15
20
4. A pack according to any preceding claim, wherein each compartment (20,40) of the pack (10) contains a different solid particulate or granular detergent powder product (22,42).
5. A pack according to any preceding claim, wherein the dispensing means (26,46) with which each compartment is provided comprises a mouth having closure means associated therewith.
25
6. A pack according to claim 5, wherein the

closure/dispensing means (26,46) of each compartment is provided at an upper region thereof at a location remote from the or each other neighbouring compartment.

7. A pack according to any preceding claim, wherein each
5 compartment (20,40) is of the same size and/or volume.

8. A method of providing a plurality of different laundry products (22,42) for selective use by a consumer, the method comprising providing a unitary laundry product pack (10) including a first compartment (20) containing a first one
10 of the said plurality of laundry products, and at least one other compartment (40) isolated from the first compartment (20) and containing a or a respective different one of said plurality of laundry products, wherein each compartment has means (26,46) for dispensing therefrom the respective
15 laundry product contained therein, whereby each said laundry product (22,42) is selectively dispensable from its respective compartment via the respective dispensing means according to the needs or wishes of the consumer.

9. A unitary pack for presenting to the consumer a
20 plurality of different laundry products (22,42) for his/her selective use, the pack (10) including a first compartment (20) for containing a first one of said laundry products (22), and at least one other compartment (40) isolated from the first compartment (20) and for containing a or a
25 respective different one of said laundry products, wherein each compartment (20,40) has means (26,46) for dispensing therefrom a respective laundry product contained therein.

10. A method of dispensing a selected one of a plurality of laundry products from a unitary laundry product pack
30 according to any one of claims 1 to 7, the method comprising the steps of:-

- (i) selecting a particular one of said laundry products to be dispensed, and
- (ii) dispensing said selected laundry product from its respective compartment via its respective dispensing means.

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Fig.1.

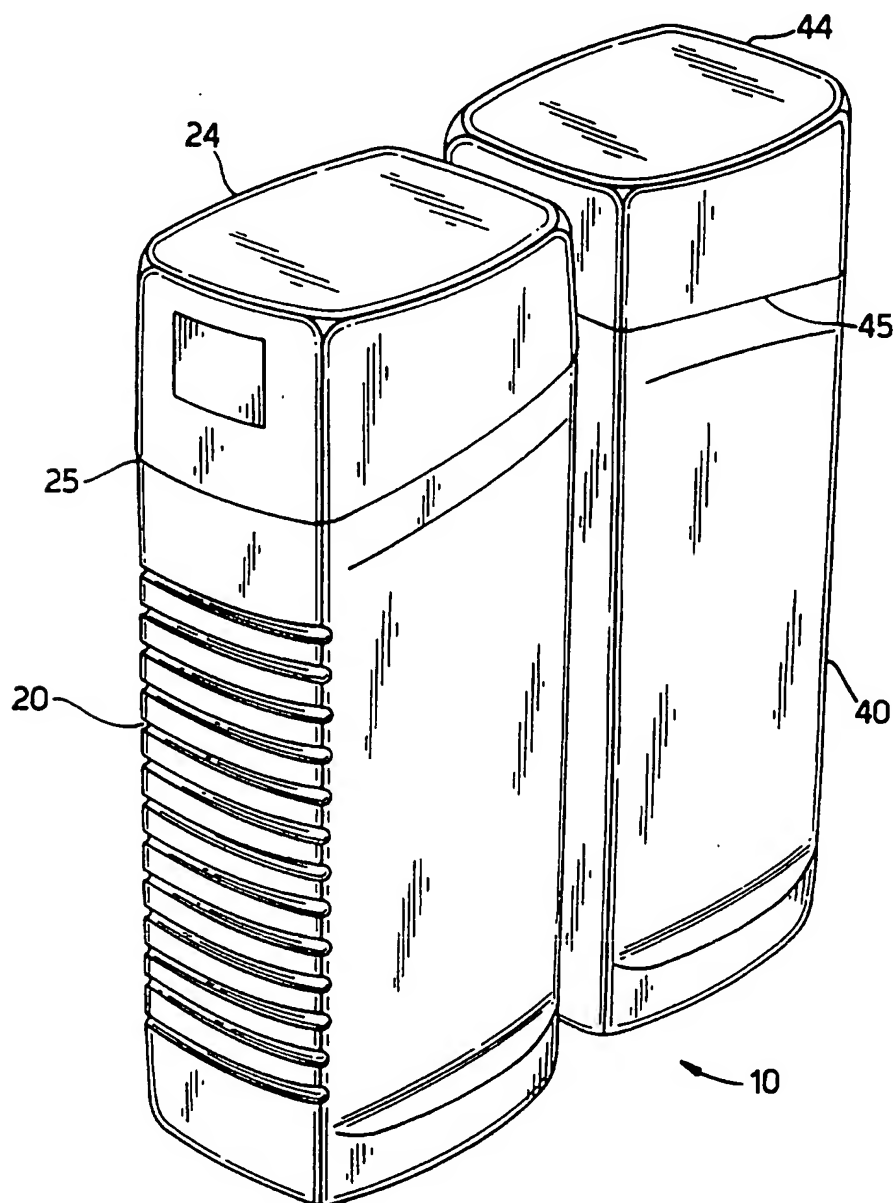


Fig.2. 2/2

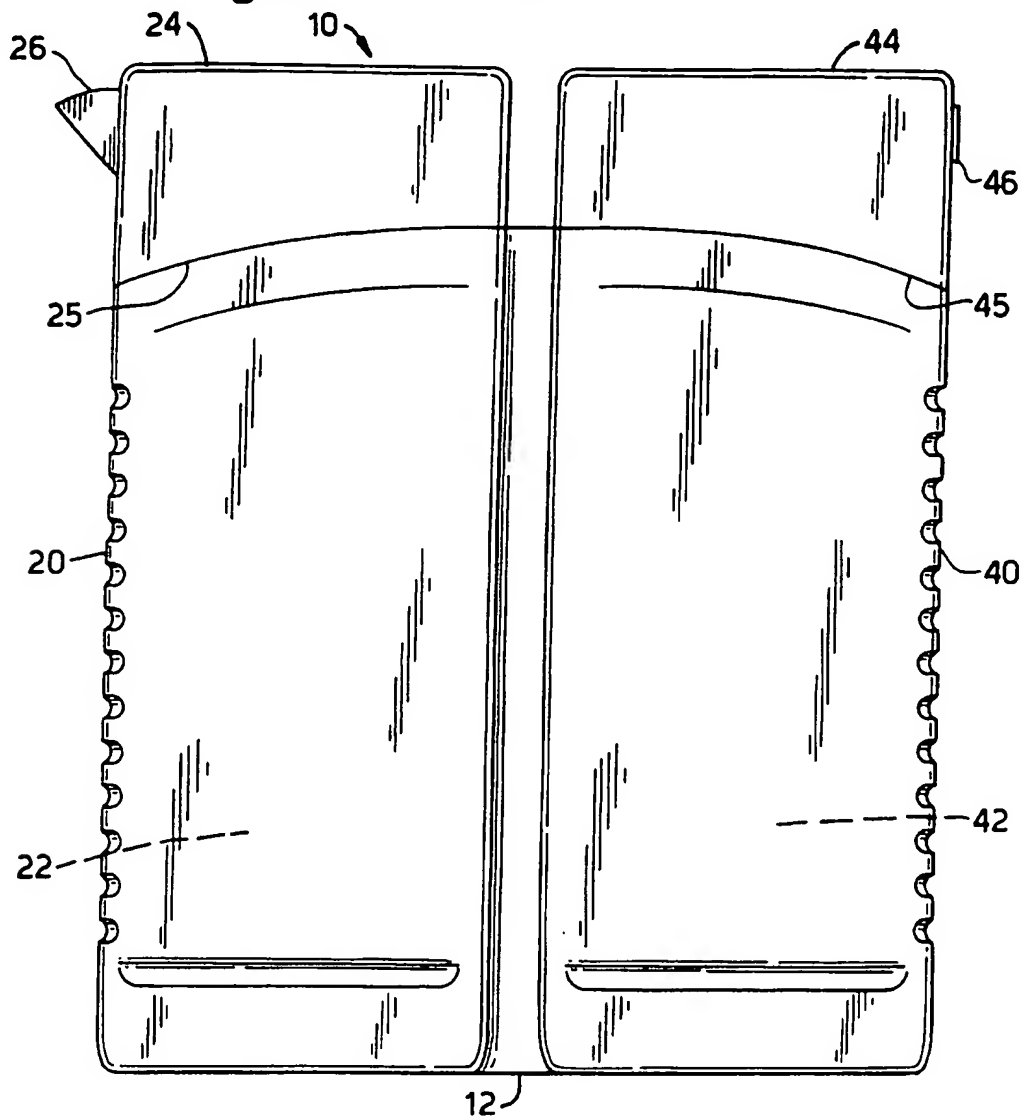
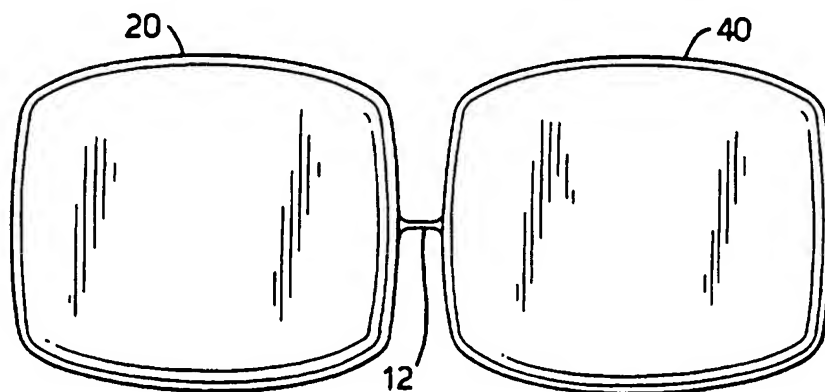


Fig.3.



INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 95/02472

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 B65D1/04 B65D69/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | DE,U,93 02 295 (KTI KUNSTSTOFFTECHNIK) 15 April 1993 see page 5, line 9 - page 7, line 1; figures 4-6 --- | 1-10 |
| X | DE,U,93 16 583 (HOMBERG) 14 April 1994 see the whole document --- | 1,2,4-10 |
| X | US,A,4 196 808 (PARDO) 8 April 1980 see the whole document --- | 1,2,4-10 |
| X | AU,A,561 374 (RUIZ) 9 May 1985 see the whole document --- | 1,2,4-10 |
| X | EP,A,0 258 885 (FOLKMAR) 9 March 1988 see column 5, line 33 - column 8, line 15; figures 1-6 ----- | 1,4-6, 8-10 |

☐ Further documents are listed in the continuation of box C.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 95/02472

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
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| US-A-4196808 | 08-04-80 | NONE | |
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| | | US-A- 4802608 | 07-02-89 |